

March 22, 2022

Mr. John L. Drago, Aviation Safety Inspector  
Flight Standards Service  
General Aviation and Commercial Division, AFS-800  
Operations Section (AFS-830)  
800 Independence Ave S.W.  
Building 10A/8<sup>th</sup> Floor/Desk #8E-604  
Washington DC 20591

**RE: Request for information: FAA-2022-0081**

Dear Mr. Drago:

Thanks for the email dated on March 18, 2022 regarding the request of additional information for FAA-2022-0081. Below are my responses:

1. Substantiate the need to disperse hazardous materials:

Based on 14 CFR Section 107.36 Carriage of hazardous materials, "A small unmanned aircraft may not carry hazardous material, and the term hazardous material is defined in 49 CFR 171.8". Some of the chemicals that need to be dispersed during the agricultural aircraft operations may be classified as hazardous material. Because this regulation is not waivable under 107.205, I am hereby requesting an exemption from it.

The only chemical falling in Hazardous Materials that I would like to disperse will be (refers to 49 CFR 172.101 Hazardous Materials Table):

Symbols: G, Hazardous materials descriptions and proper shipping names: pesticide, liquid, toxic, n.o.s., Hazard class or division: 6.1, Identification number: UN2902, Packing Group: III (minor in danger), Label Codes: 6.1, and Special provisions (172.102): 1B3, T7, TP2, TP28.

The reason to seek this relief is that to showcase farmers such technology and educate them to implement the artificial intelligence (AI) for future farming, which is the mission of University of Florida, and also one of my job responsibilities as extension faculty in commercial vegetables and pesticide training. Granting of this request will be in the public interest because our farmers are seeking up-to-date technologies with the great advantages of small unmanned spray aircraft in labor-saving, quick responding, and with less or without ground disturbing compared to conventional practices. The intensive implementation of this technology will significantly improve our agricultural industry.

With professional handling, dispersing pesticide with small unmanned aircraft will not create adverse effect in safety. As a matter of fact, it is much safer for the pesticide applicators as compared to the conventional application with backpacker or tractor-dragging sprayer because the latter has more chances for pesticide exposure. The required exemption would provide a level of safety because I will be the unmanned aircraft operator and I am certified pesticide applicator by Florida State and the University of Florida Pesticide Applicator Trainer for over 8 years. I will ensure to follow the federal and state rules in dealing with pesticide because safety is always the top priority.

In conclusion, the equivalent level of safety can be achieved by requiring the Petitioner to obtain a FAA agricultural aircraft operator certificate prior to operations, use the pilot with valid remote pilot certificate, fly aircraft weighing less than 55 pounds with diluted hazmat carried, follow all restrictions pertaining to the agricultural aircraft operator certificate, and limit the hazardous material being carried to only economic poisons. In addition, the requirement to use only FAA-certificated remote pilot for operation can alleviate any security concerns as the TSA would have done a background check already on the individual possessing the remote pilot certificate.

I hope the above justifications are acceptable but if additional information is needed, please feel free to let me know.

2. A copy of your Operations Manual submitted separately.
3. A copy of your Training Manual submitted separately.

Sincerely,



Qingren Wang, Ph. D

Extension Agent in Commercial Vegetables and Pesticide Training

UF/IFAS Extension Miami-Dade County

[qrwang@ufl.edu](mailto:qrwang@ufl.edu)